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ABSTRACT

A statement by Senator Orrin G. Hatch opened the hearing on The Computer Software Rental Amendments Act of 1988, a bill which would amend title 17, United States Code, the Copyright Act, to protect certain computer programs. The text of the bill is then presented, followed by the statements of four witnesses: (1) Dr. Alan C. Ashton, president, WordPerfect Corp.; (2) Heidi Roizen, president, T/Maker Co.; (3) Thomas Chan, deputy general counsel, Ashton-Tate Corp. for ADAPSO, the Computer Software and Services Industry Association; and (4) Craig Burton, executive vice president, Novelle Corp. Additional submissions from the record include: letters to Senator Hatch from James W. Johnston, executive vice president, Electronic Text Corp., and Reid C. Swenson, owner, Computer Bargain Store; comments of James U. Jensen and Kent J. Wallin, attorneys, in support of S. 2727; and a news release on a study by Future Computing Inc. on business software piracy, which includes graphs presenting proportions of authorized and unauthorized office software and the impact of unauthorized copies on the office software market. (MES)

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S. HRG. 100-1048

THE COMPUTER SOFTWARE RENTAL AMENDMENTS ACT OF 1988

HEARING

BEFORE THE

SUBCOMMITTEE ON
PATENTS, COPYRIGHTS AND TRADEMARKS

OF THE

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

SECOND SESSION

ON

S. 2727

A BILL TO AMEND TITLE 17, UNITED STATES CODE, THE COPYRIGHT ACT TO PROTECT CERTAIN COMPUTER PROGRAMS

PROVO, UT

AUGUST 24, 1988

Serial No. J-100-86

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THE COMPUTER SOFTWARE RENTAL AMENDMENTS ACT OF 1988

WEDNESDAY, AUGUST 24, 1988

U.S. SENATE,
SUBCOMMITTEE ON PATENTS,
COPYRIGHTS AND TRADEMARKS,
COMMITTEE ON THE JUDICIARY,
Provo, UT.

The subcommittee met, pursuant to notice, at 9 a.m., at the Utah County Complex, Commission Chambers, Provo, UT, Hon. Orrin G. Hatch presiding.

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

Senator HATCH. We have a very important hearing this morning, and I have a special problem. One of my dear aunts died, and her funeral is this morning at Pleasant Grove. So I can only stay for the first part of the hearing, and I'm going to have my staff conduct the remaining part of the hearing and make this record for us. I planned on staying the whole time, but I think I had better go to my aunt's funeral. So if you'll forgive me, I'll have to leave about 10 o'clock.

So why don't we begin. On August 10 I introduced S. 2727, the Computer Software Amendments Act of 1988. The purpose of the bill is to amend the copyright law to address the problem of unauthorized computer software duplication.

A copyright has been defined as: "A legal monopoly, of limited scope and duration, under whose terms authors are permitted to control the exploitation of their creations." Under the Constitution, Congress is empowered to create this monopoly and to set the parameters of its exclusivity. In determining where the proper limitations should be drawn, Congress must carefully weigh the copyright owner's rights against the progress of science and the useful arts.

In the past, Congress has created general, and in some cases specific, limitations on exclusivity which promote a balance between these policy interests. In fact, the operation of these limitations on exclusivity has in some part contributed to the rise in U.S. technology.

As that technology changes and as society changes, there is a need to maintain flexibility in our copyright laws. I believe this flexibility is essential to ensure a constant balance between an author's exclusive rights and the constitutional interest in promoting

societal needs. Today we will spend some time in discussing that particular balance.

In 1984 the record industry made its case that new marketing techniques would undermine the economic and authorial incentives for a viable recording industry. At that time it was apparent that technological advances were leading to the birth of the new business of renting sound recordings for the primary purpose of copying original works without compensation to the copyright owner. Congress responded to this threat to the copyright laws by enacting the Record Rental Amendments of 1984.

Because Congress acted before the rental of records became a widespread business practice, the U.S. record industry was able to continue in its position of world leadership. The industry reinvested substantial sums in a new generation of sound recordings—compact disks—without fear of losing the market to unauthorized copying. The interests of the creative community, the American public, and the U.S. economy all were advanced by Congress decision to act before reliance on the previous inadequate law produced an economic dislocation which would have been very difficult to eliminate.

Today the computer software industry, a dynamic and blossoming source of growth for our Nation's economy, is confronted by a nearly identical situation.

As in the case of sound recordings, the overwhelming rationale for renting a computer program is to make an unauthorized copy. Computer software cannot be enjoyed for an evening's entertainment and then returned. To have meaning to a user, the software packages require mastery of complex user manuals, often running hundreds of pages in length. Even after a user has mastered the use of a program, it has little value until he or she adds his or her own data base to the program. The functions of learning how to use a program and utilizing it in connection with one's own data base cannot be accomplished in a few hours or days available under a rental arrangement without copying the program and displacing a legitimate sale of that particular program.

In the recording industry a typical compact disk sells for $16.95 and costs hundreds of thousands of dollars in developmental costs to bring to the marketplace. Some say millions of dollars under circumstances. A typical mass market computer software package costs several hundred dollars at retail and require millions of dollars to develop. Were computer programs to be rented for a few dollars a day, the multimillion dollar investments necessary to bring new software to the market could no longer be amortized, and one of the brightest stars of the modern U.S. economy would be extinguished in its very infancy.

As with the recording industry, there is now in existence the embryo of a business of rental of software for the purpose of copying. Unless Congress acts quickly, this rental industry could soon grow out of control, becoming a cancer which would kill off the legitimate software development industry by which it was created. This is particularly true in view of the fact that technological methods of limiting unauthorized copying, commonly called "copy protection," are proving impractical in an industry in which there

is often a need for legitimate use of "backup" copies by purchasers of authorized copies of computer programs.

The impact of software rental could be particularly devastating here in Utah Valley, which has sometimes been referred to as the Silicon Valley of Software. I'm really proud of the burgeoning industries that are arising in this particular area. It is putting our state on the map in this area like never before.

The growth of a runaway software rental industry would mean the loss of several hundreds of thousands of dollars to businesses such as Utah's WordPerfect and Novell and the subsequent loss of an important source of jobs in this market. And I'm only mentioning two of the larger companies in this area.

For example, it has been reported that one WordPerfect program which retails at $495 has been available through a rental outlet for only $35. The most obvious rationale for such a practice is to facilitate the unauthorized copying of this program. The potential for lost sales and the subsequent collapse of these software companies is a serious problem that must be addressed.

The bill I introduced would provide software protection by requiring the authorization of the copyright owner or licensee before a particular copy of a computer program could be rented or leased for the purposes of direct or indirect commercial advantage.

[The text of S. 2727 follows:]

II

100TH CONGRESS
2D SESSION

S. 2727

To amend title 17, United States Code, the Copyright Act to protect certain computer programs.

IN THE SENATE OF THE UNITED STATES

AUGUST 10, 1988

Mr. HATCH introduced the following bill; which was read twice and referred to the Committee on the Judiciary

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A BILL

To amend title 17, United States Code, the Copyright Act to protect certain computer programs.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Computer Software Rental Amendments Act of 1988".

SEC. 2. Section 109(b) of title 17, United States Code, is amended by—

(1) amending paragraph (1) to read as follows:

"(b)(1) Notwithstanding the provisions of subsection (a), unless authorized by the owners of copyright in the sound recording or the owner or licensee of copyright in a computer

program (including any tape, disk, or other medium embodying such program), and in the case of a sound recording in the musical works embodied therein, neither the owner of a particular phonorecord nor any person in possession of a particular copy of a computer program (including any tape, disk, or other medium embodying such program), may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that phonorecord or computer program (including any tape, disk, or other medium embodying such program) by rental, lease, or lending, or by any other act or practice in the nature of rental, lease, or lending. Nothing in the preceding sentence shall apply to the rental, lease, or lending of a phonorecord for nonprofit purposes by a nonprofit library or nonprofit educational institution."; and

(2) amending paragraph (3) to read as follows:

"(3) Any person who distributes a phonorecord or a copy of a computer program (including any tape, disk, or other medium embodying such program) in violation of clause (1) is an infringer of copyright under section 501 of this title and is subject to the remedies set forth in sections 502, 503, 504, 505, and 509. Such violation shall not be a criminal offense under section 506 or cause such person to be subject to the criminal penalties set forth in section 2319 of title 18.".

Senator HATCH. As part of the process of reviewing the need for such legislation, the subcommittee has invited a group of distinguished witnesses to express their views on the proposed bill. We will hear from Mr. Alan Ashton, president and cofounder of the WordPerfect Corp. here in Orem, UT. We will next hear after him from Mr. Craig Burton, executive vice president for Novell, Inc., of Orem, UT. We will also hear from Ms. Heidi Roizen, president of T/Maker Co. in Mountain View, CA, and president of the board of directors for the Software Publishers Association in Washington, DC, and Mr. Thomas Chan, deputy general counsel of the Ashton-Tate Corp., speaking on behalf of ADAPSO, the Computer Software and Services Industry Association.

The threat of unlimited computer software rental poses just as grave a concern to the computer software industry today as did the threat of unlimited record rental to the recording industry in 1984. I played a role and was one of the major sponsors of that particular bill back in 1983 and 1984, along with Senator DeConcini; and we want to do the same to protect these industries in an appropriate way in 1988.

I look forward to the testimony we will be receiving from our witnesses during this hearing, and I appreciate the cooperation of all concerned. This is an important hearing. It involves billions of dollars ultimately, and it certainly means hundreds of millions, if not billions of dollars to Utah County and Utah Valley. So we're really pleased to have everybody with us today.

Let me just begin by calling upon Dr. Alan Ashton, president of WordPerfect Corp. here in Orem, UT. We also have with him Ms. Heidi Roizen, the president of T/Maker Co. in Mountain View, CA, and the president of Software Publisher's Association. We are very happy to welcome both of you here; and we will appreciate the testimony that you give to us, because we'll be guided very greatly by it.

Let me also say that I want to thank Senator DeConcini, who is the chairman of this subcommittee. I'm the ranking Republican leader on the subcommittee, and I enjoy working with Senator DeConcini. We agree on almost everything, and we have worked effectively together now for 12 years, since we both came into the Senate at the same time. He is one of my best friends in the Senate. I just want you to know that. We have a good subcommittee, and we're going to try and do everything we can to see that these industries have the appropriate protection that should be provided under our copyright laws.

I might also say that Senator DeConcini apologizes for not being here today, but he also is up for reelection this year, and he felt that he had better stay in Arizona, and he felt that I could handle this.

So with that, we are going to turn to Dr. Ashton first and Ms. Roizen second.

STATEMENT OF DR. ALAN C. ASHTON, PRESIDENT, WORDPERFECT CORP., OREM, UT

Dr. ASHTON. Thank you, Senator. We appreciate your work in preparing this S. 2727 bill. I'm Alan Ashton, president of WordPer-

fect Corp. My background has been in academia. I've been a full professor of computer science at Brigham Young University and have lectured and have taught at the University 16 out of the past 18 years.

WordPerfect Corp. is a computer software company which develops office automation programs for various prominent computer systems. I'd like to just tell you a little bit about WordPerfect and how we got started.

In the summer of 1978, while I was not teaching, I designed a word processing system around some new programming techniques which we had discovered in our previous work with computer music research.

My partner, Bruce Bastian, and I implemented this design for Eyring Research Institute, who had a contract with the city of Orem. In exchange for my design and my work on Saturdays and in the evenings and for Bruce's extra work, we retained the rights to the software; and after putting it on the Data General computer for Orem City, we then took the software and put it onto other operating systems in the Data General environment.

Then the IBM PC came out, and we transferred that code and put it onto the IBM PC. Little did we know what an explosion that would be. I've often said that word processing is the best application on computers, because everybody writes. Everybody needs to communicate. And truly it has really taken the market by storm. We have become the No. 1 selling word processor in the world for PC's.

All of the distributors have hot lists where they keep track of the highest selling products, and we have come to the top of those lists in business software overall, and certainly in word processing.

We've had good reviews. We've been able to take WordPerfect and translate it into 11 foreign languages, the Scandinavian, French, German, Spanish, and other languages throughout the world; and we think it's very important for us, to retain our world leadership, that we need to show that we can protect the software here in the United States, so that we can expect that protection overseas and in other countries.

We have increased at about 100 percent a year. Our growth has been phenomenal. Two years ago we had sales of $52 million, last year sales of $100 million. This year so far we've had sales of $100 million. We now have 900 employees, and the work that they do has really strengthened the economy of the Utah Valley.

Mr. Chairman, we believe that WordPerfect Corp. is the prototype of the kind of industry which will lead Utah and America into a prosperous future. The work performed by our employees is of a kind that could only be faintly imagined by our forefathers. In general, companies like those represented here today express the best of what I know to be your values: individual initiative, unencumbered by government intervention, operating in a free marketplace to develop the goods and services which consumers need.

Occasionally, however, we do need the cooperation of our elected representatives in order to provide the conditions which will enable individual initiative to take root and grow. This is particularly true where Congress has the function of establishing the rules of fair play which make it possible for private initiative to blossom.

Our Founding Fathers saw this important role for government when they specifically enumerated in the Constitution certain rule-making powers of the Congress. One of these enumerated powers is set forth in article 1, section 8, which states:

> The Congress shall have power . . . to promote the progress of science and useful arts, by securing the limited times to authors and inventors the exclusive right to their respective writings and discoveries.

Of course, Senator, you are familiar with this passage because of your leadership role in this Senate Subcommittee on Patents, Copyrights and Trademarks, which has the responsibility of carrying out this constitutional mandate. I believe that this hearing will establish the case for enacting your bill, S. 2727, into law. S. 2727 will grant to owners of copyrights in computer software programs the power to authorize rental of such programs.

Mr. Chairman, in making the case for S. 2727, I would like to begin by reciting an old proverb: "Possession is nine-tenths of the law." This notion—that if you physically possess something you must have legal rights to it—is the basis for much of our Anglo-American property law system, and in the past the concept has worked well. The creator of a tangible physical product always has had the ability to withhold literally the fruits of his labor from another until a buyer paid a fair price. That principle still holds true today for the traditional industries of Utah. Our mining companies do not ship ore to smelters and mills until they are assured of payment. Our farmers do not turn over their crops or cattle to food processors until they get paid.

However, in the case of software companies like WordPerfect, this old-fashioned system breaks down. You see, we do not make a physical product. Of course, our products utilize floppy disks and paper manuals, but we do not make disks or paper. We "make" the programs, the information, that is electronically written onto disks and which appear on paper. And the value of this information is far, far greater than the disk or paper on which it is written. In short, what we "make" is a form of authorship called a computer program, which is very similar to other works of the mind such as books, records, and movies. As in the case of these other types of works of authorship, our products have a value in the marketplace, not because we can hold back the physical article until we are paid, but because they are protected by the copyright law. Were it not for the copyright law, anyone could get hold of a copy of a book, a movie, or a computer program and compete with its creator by making thousands of copies without paying any of the creator's development costs, much less a fair price.

Mr. Chairman, as important as copyright law has been to many sectors of our economy, we understand that Congress has always—wisely—been careful about giving creators the right to sue for infringement only in very carefully defined situations. The exclusive rights of copyright owners always have been limited. For the most part, the exclusive rights of a copyright owner have been restricted to the right to make copies of a work and the right to perform or display it for the public. Our American book publishing, theatrical and motion picture industries have been built into a place of world

leadership second to none, using only these two very limited rights provided in the copyright law.

As long as these two rights are not violated, the buyer of a legitimate copy of a book or a movie is essentially free to do with it as he or she will, including renting it to others. The rental of the copy normally does not deprive the creator of books or movies of the market needed to keep his business going. In fact, it may even generate business, as in the case of the home video industry, where movie companies sell copies to stores for the specific purpose of rental.

The right to do whatever you want with a legitimate copy of a copyrighted work after its first sale to any consumer is known as the First Sale Doctrine. This principle is spelled out in the copyright law in section 109. Mr. Chairman, most industries which rely on copyright protection have been able to live and prosper with the First Sale Doctrine. However, occasionally the nature of a particular technology require that general principles of law be modified slightly so that the underlying purpose of the law is served.

Four years ago just such a case was presented to you by the Nation's record industry, and you responded accordingly. In 1984 it was clear that rapid advances in home taping technology meant that individuals could make a perfect copy of a legitimate record at home. While no one proposed to prevent citizens from copying in their homes, the consequences to the record industry would have been catastrophic if such a practice were to have been permitted on a large scale for commercial gain.

In 1984 there were a small number of commercial enterprises which were gearing up to rent records and compact disks so that they could be taken home and copied. Such rental businesses, of course, would have undermined the exclusive rights of copyright owners to make and sell copies. As a result, Congress moved in before the problem got out of hand and modified the First Sale Doctrine with a very limited amendment which restricts the rental of sound recordings.

Mr. Chairman, we are led to understand by experts in the sound recording industry that the 1984 amendment has worked well. Entrepreneurs have been encouraged to invest somewhere other than in record rental shops, and consumers have benefited from the choices made available by a vital and growing record industry. In recognition of the success of the 1984 amendment, the Senate recently voted to lift the "sunset" on the provisions and make it a permanent part of the Copyright Act.

The computer software industry today is in the same position as the record industry of 4 years ago. This is recognized by your introduction of S. 2727, which would amend section 109 of the Copyright Act to give the same kind of protection against rental to owners of copyrights in computer programs.

Just as in the case of the record industry, there is a fledgling software rental business now getting underway. I have some examples of advertisements of such businesses, which, with your permission, I would like to include in the record.

Senator HATCH. Without objection, that will be done.

[Above-mentioned examples of Dr. Ashton were placed in subcommittee files.]

Dr. ASHTON. Here is one from Texas Software Exchange. It shows DBase Plus, which is a national tape product retailing at $695. They can rent it for $35. Our own WordPerfect, which retails at $495, can be rented at $35. There are a number of other such instances now that are appearing in magazines available to the public in general.

Mr. Chairman, while the computer software industry is very much in the same position as the record industry of 4 years ago, I believe that there is an even greater need for Congress to move quickly on the question of software rental. While a typical compact disk costs only $16.95 at retail and takes approximately 1 hour to copy, a typical software package—such as WordPerfect—has a suggested retail price of $495 and can be copied in seconds. The incentive to rent software for the purpose of avoiding purchase of a copy is much greater than in the case of record. Clearly, the development of a large-scale rental business would jeopardize the future of companies such as WordPerfect. The prices we charge for our software reflect the costs of creation. If we were unable to amortize the costs of investment in products like our WordPerfect word processing software, we would be unable to continue the support of our product with the customers; we would be unable to continually enhance, improve, and update the product; and, finally, we would be unable to invest in the research and development efforts which keep us competitive and able to deliver superior products to the end user.

Also, it would make it not possible for us to offer the support that we need so that users, when they get the products, are able to use it efficiently and well.

I hope, Senator, that you will take note of the fact that we're not asking you to change the law to prohibit the rental of software. We are asking only that the right to authorize rental be given to us, the copyright owners. Should there be a legitimate need or consumer demand for rental of software, such a need can and will be satisfied by us with appropriate safeguards, because the market will demand it. However, we will have the right to participate in the market and to reap our proper reward for participation. We won't have our product taken from us.

Mr. Chairman, on behalf of all the employees of WordPerfect, I want to thank you for introducing S. 2727 and to ask that you and your subcommittee move quickly to enact it into law. We will be happy to assist you in any way necessary to achieve this much needed goal.

Senator HATCH. Thank you, Dr. Ashton, I'm very proud of what you've been able to accomplish, you and those who are affiliated in working with you. It's nothing short of phenomenal, and you are world renowned. You're right out of our State, in this area; and I think more people need to know that, and I intend to see that they do.

Dr. ASHTON. Thank you.

Senator HATCH. In your statement you noted a large difference in price between the typical compact disk and the average software package. Now, this would seem to increase the incentive to copy a program rather than to purchase it directly from a dealer. Is there any reason anyone would rent computer software other than to

make a copy to avoid purchasing the actual program? Can you think of any reason?

Dr. ASHTON. I don't think so. None that I know of. There are opportunities in dealerships for people to go in to take a look at software, and there is somebody there to actually show them. So it wouldn't be a reason just to be introduced to the software.

We also provide demonstration copies, some of which can't be copied, others of which are restricted in some way so that it wouldn't be commercially viable, and customers can get to know the product and see it that way.

Senator HATCH. For purposes of our hearing and to establish a record, I'm going to ask you kind of a rudimentary question; you explained that a typical software package of WordPerfect retails for over $200, while a single compact disk sells for $16.95. Why is software so expensive?

Dr. ASHTON. It's expensive because it requires the talents of hundreds of highly educated employees to develop, and it requires the use of very high technology equipment, such as computers and memories and disks.

It's not like the product of a single musician or a group of musicians. Also, for a very successful product which makes it to the market, there may be months and years of research which does not produce a product.

In our case it's been since 1978 continual work and enhancements to get WordPerfect up to point that it is. So that's 10 years of work that has gone into producing the WordPerfect of today.

The employees of companies like WordPerfect must pay mortgages and raise kids during these times. It's the sale of successful products which enables them to sustain the investment necessary to develop the next generation of products, and this is an expensive process. Software costs would actually be higher if the rental industry came in, because we would not be able to amortize it over such a large marketplace.

Senator HATCH. It would also stifle the development, because there wouldn't be any financial incentives to develop and create the software.

Dr. ASHTON. Exactly.

Senator HATCH. We were finding that in something as simple as the record industry.

Now, will we be encouraging higher prices if we pass this legislation, for software?

Dr. ASHTON. No. I believe that if this legislation goes through that you will not be encouraging higher prices, because we will be able to receive the remuneration for the work and be able to supply software at good prices for the customer for people at large.

Senator HATCH. All right. As I also understand it, there are some computer hobbyists who enjoy creating software just for fun, without any interest in exploiting their creations for commercial gain. These hobbyists sometimes choose to dedicate their creations to the "public domain." Now, would this bill, S. 2727, restrict these individuals in any way from doing that in the future?

Dr. ASHTON. No. Just as the rights of copyright owners under the current law can be waived if the copyright owner wishes, so could a creator and owner of a copyright in a computer program permit

rental of his work. S. 2727 simply gives the right to the copyright owner to authorize rental. It does not prevent rental where desirable.

Senator HATCH. I have really appreciated your testimony. It really costs a lot of money to develop a software production company.

Dr. ASHTON. It certainly does.

Senator HATCH. And you continually have to put that money in, even when there is no money coming back to you.

Dr. ASHTON. That's right. And ongoing support is a very important thing, too, for customers to be able to call up a company on a toll-free basis and get information. We have been able to supply that support to the community, and that costs a lot of money as well.

Senator HATCH. I appreciate that. Again, I just want to say—of course, I didn't comment about what a beautiful set of surroundings we have to hold this hearing in. This is the first time I've been in this building. It's pretty impressive, and it's just typical of the way Utah County and Utah Valley are progressing; and I believe people like you and the others associated and affiliated with you are the reason. Of course, the great University here, and all of the creativity that exists in this area is starting to blossom, and this is going to become one of the great idea areas of the world, and you've made it that with WordPerfect, as has Novell with its system.

So I couldn't be more proud as a representative than to have you representatives of your respective companies here today. I think your testimony has been very important to us and will help in the end to pass this bill. At least, we hope so.

Dr. ASHTON. Thank you very much.

Senator HATCH. Let's turn to Ms. Roizen. We appreciate your traveling here and being with us today, because we know that you represent a large segment of the industry, and we're very proud to have you with us, and we welcome you to Utah.

STATEMENT OF HEIDI ROIZEN, PRESIDENT, T/MAKER CO., MOUNTAIN VIEW, CA

Ms. ROIZEN. Thank you. It's a pleasure to be here. I guess I represent a large segment and a small segment as well. I come today to testify in three capacities:

First, as an individual entrepreneur, who has been involved for many years in the exciting challenges and opportunities of the rapidly growing field of computer software.

Second, as an executive of a small software company with a limited number of products, who recognizes the vulnerability of my company to the devastating potential of unauthorized commercial exploitation of our products. My company produces a word processor for the Macintosh. Although I have only 14 employees, I have found myself in the position of competing directly with such industry giants as WordPerfect, Microsoft, Ashton-Tate, and a subsidiary of Apple Computer called Claris.

Finally, I also represent the Software Publishers Association, a trade association of more than 350 companies that develop and

market software for microcomputers. The very growth of the Software Publisher's Association from only two dozen members just 4 years ago to the hundreds that are now joining to participate in the computer revolution is itself a testimony to the economic importance of the computer software industry and of this important legislation.

I would like to take a slightly different approach from the other witnesses here today and represent the small company concerns.

Most Americans are aware of the large and dominant companies in our industry, such as Ashton-Tate, Lotus, Microsoft, and WordPerfect, all of whom are members of the SPA. Since I was honored in May of this year by my colleagues in the industry to serve as our organization's president, I have worked closely with a wide range of distinguished software industry leaders. Several of those leaders are here at today's hearing. I concur with the concerns that they are expressing about the economic impact of commercial rentals of mass marketed software products.

I am here today, however, to represent the SPA's smaller businesses. More than one-half of the SPA's 350 members have sales that are less than $1 million per year, and more than 80 percent of the software developers and publishers in the United States today have fewer than 15 employees.

It is, therefore, important to consider that the hundreds of small businessmen and women seeking an opportunity to grow are embodiments of the American spirit and the American dream. Our industry has many success stories. It also has hundreds of success stories that are yet to be written, as entrepreneurs take single products or ideas and try to build a business in this new and dynamic industry.

WordPerfect, one of the industry's greatest successes, and a competitor of my own company, began with a single product. I question whether WordPerfect, or any other of the industry giants, would have been able to establish their position in the industry if their initial products had been taken by commercial exploiters, such as commercial software rental shops.

This is the issue at hand. It is vital to our entire industry—large corporations and small startups alike—to nip commercial rental and commercial exploitation in the bud. If a software company develops a software product that fulfills a new need and captures the public's interest, that company's growth can be squashed if unauthorized commercial parasites are able to exploit and, if you will, steal the ability and reap the benefits from that product.

Commercial rentals have not yet become widely utilized by such exploiters, but I cringe at the computer magazine ads I am beginning to see for mail order "rentals," which we all know in reality are nothing more than invitations to rent the product, make a copy, and then return the disk for someone else to do the same. I would like to describe one of the worst examples of software rental.

A company called SoftView in Southern California produces a product called MacIntax. It is a very clever Federal tax preparation tool. The product asks the right questions, performs the necessary calculations, and then prints your return on an approved lookalike IRS 1040 form. As you might expect, the product is quite popular in March and early April of each year. The selling season for

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MacIntax is quite short. It is even shorter when rental companies give the users the opportunity to take the product home, copy it, and return the original to the rental shop. SoftView is very seriously affected by software rental, and the firm has no defense against it. We can see very clearly that if the rental problem in the United States grows, SoftView and its very clever MacIntax program would not survive. This is just an example of how innovative products can be devastated by software rental.

I am generally familiar with the committee's adoption and recent extension of the record rental prohibitions. That measure, as I understand it, was designed to prevent the problem of record rentals and inhibit the establishment and growth of record rental stores before they became a serious problem. To the extent that the record rental amendment was necessary, which I agree with, it is equally, if not more imperative, that the cancer of commercial rental of software products can be prevented from growing. Let me quickly address one "red herring" that often is raised in connection with the rental issue, and this is the so-called right of potential customers to try out a computer product before buying it. Once again, I can speak for hundreds of small software developers in asserting that we want, particularly given our limited number of products, to ensure that customers have the opportunity through in-store demonstrations, demo disks, and through the advice of the dealer network to make informed choices. The Nation's largest retailer of software, Egghead Discount Software, permits a customer to open any box and try out any product in the store. Many customers who are uncertain as to which product to choose take advantage of Egghead's policy. The result is a more informed choice by the customer. The industry, our industry, which also supports this, is, therefore, permitting the customers to "try before you buy."

Software Rentals, however, defended on the "try before you buy" argument are too pricey to be a true rental. You can rent videos and movies for $1.50 to $3. The disproportionate price of the commercial software rental outlets in existence today, which may rent software for 25 percent of the software product's selling price, clearly shows that the true purpose of software rentals is simply to facilitate illegal copying.

Small software businesses like mine and the entire Software Publisher's Association support the comments and analysis of the rental issue being provided to you by the giants of the industry today.

In addition to your review of the legal and economic issues, I urge you to keep sight on the important human dimension: the entrepreneurial spirit and imagination that is the driving force behind our industry. Our laws simply must be revised to protect the ideas and work product of a growing American industry, an industry in which we still lead the world.

Without the protection of the Computer Software Rental Amendment of 1988, the software rental problem will grow; and the most serious impact will be felt by those companies that need each and every sale to survive. Small companies like T/Maker and SoftView are dangerously vulnerable to the theft of our products. And large

companies like WordPerfect and Microsoft are entitled to be compensated for each and every product that is copied.

We are a unique industry in many ways: We are nearly 100 percent American; our industry's exports make a very substantial positive contribution toward reducing our negative balance of payments; and our industry is continuing to grow and create new computer-based solutions in nearly every field of human endeavor. Yet we are an industry without protection. We demand on moral suasion to prevent people from stealing our work product. Moral suasion is not enough. We need your support in protecting our industry.

Thank you for your attention and for your support of our vital new industry. We strongly urge your swift enactment of this legislation. The SPA is prepared to work closely with this committee and the Congress as a whole in answering any question that would be helpful to you.

Senator HATCH. Thank you. We're delighted to have you here today. For those who don't understand, I can understand how you can copy a recording. It's easy to get the separate recording device and just copy it on a cassette tape or whatever. But how do you copy a floppy disk or one of your products?

Ms. ROIZEN. Well, it's a very simple process of putting the computer floppy diskette into one of the drives and copying it either onto another diskette or——

Senator HATCH. Just take another diskette and just put it right across, right onto it?

Ms. ROIZEN. That's right. And unlike many of the recordings in the record industry, which are analog recordings, and, therefore, there is a degradation between the original and the copy, because we're a digital industry, the copy is an exact duplicate.

Senator HATCH. I see. So it's just a very simple thing to do? Anybody could do it?

Ms. ROIZEN. Very, very simple. And, in fact, we encourage our customers to do it when they legally own the software, because it facilitates their use.

Senator HATCH. Sure. So it's something like WordPerfect, where you have the multihundred dollar package?

Ms. ROIZEN. Yes.

Senator HATCH. It could be bought and then just copied off and sold for $25, $35, $40?

Ms. ROIZEN. That's right. In fact—how many diskettes does the current version of WordPerfect——

Dr. ASHTON. We have 11 diskettes at this time.

Ms. ROIZEN. So for about——

Senator HATCH. What does it cost for duplicating a diskette?

Ms. ROIZEN. About a dollar.

Senator HATCH. So you could copy it for $11?

Ms. ROIZEN. Right.

Senator HATCH. And how much does that program cost, 11-diskette program retail?

Dr. ASHTON. $495.

Senator HATCH. $495. So for 11 bucks you can get a $495 program?

Ms. ROIZEN. Right.

Senator HATCH. And you could go out and sell it yourself, then?
Ms. ROIZEN. Right.
Senator HATCH. Under current law?
Ms. ROIZEN. Yes.
Senator HATCH. And you still have some rights under current law, I have to hasten to point out. But that would be very difficult to police, wouldn't it? Very, very difficult to police? And in essence, what you're doing is giving away your product that costs you millions of dollars to develop and do it for $11 a copy, or a set of copies.
Ms. ROIZEN. Yes.
Senator HATCH. That's pretty interesting. You can see why I'm concerned about this. I have to tell you, if WordPerfect, Novell, and others had not been in our area, I might not have been as concerned. We probably would have been, because we think it's a real injustice. But we will see what we can do.
Let me ask how this legislation might affect libraries and schools, for instance. The 1984 record rental amendment specifically permitted the rental of records in not-for-profit libraries and educational institutions. Now, S. 2727 as written does not contain that exemption. In your view what is the rationale for such a distinction? I know what I'm thinking, but I want to know what you're thinking.
Ms. ROIZEN. I can only give you my personal view from what we've done as a company. We've been very involved in the educational licensing of our software. Unlike a record, which doesn't require the user to have contact with the original creator, we very frequently find, as WordPerfect does, that our users need to have contact with us to provide further upgrades of the product, to provide the kind of user support, help them use our product. They're not as simple as a record. And because of that, we have worked closely with universities, where the installed base of users becomes very large very quickly, to provide a cost-effective way for them to provide their students with our software. So we work with them directly and provide very, very reasonable—for example, Cornell University has licensed our product. And a student can get right now our word processor which retails for $175 for $18.
Now, that's been done, because we can afford to do so in the way that we've structured the deal with that university. So we feel that our industry is aware of the needs of higher education and all the areas of education, and we can accommodate that independently.
Senator HATCH. Dr. Ashton, do you do similar things, or do you have similar experiences?
Dr. ASHTON. Yes, we do. We have special programs with universities and with libraries. We have made arrangements for libraries to actually have students come in and use the word processing part-time. In a library you can check out a book and read it over a short period of time. But if you're checking out a piece of software as a rental, you really don't get a chance to go through all of the manuals, as you have very adequately described earlier. You have a chance to use that product. You develop your computer documents, and you need to have those documents around for later use.

So just a rental of a night or two really does not serve the purpose for the use of computer software. So the use would really be to copy it.

But where there are cases to the extent that a legitimate needs for library or educational uses arise, we will be happy to work with the educators to accommodate those needs. And the legislation exclusively permits us to authorize the rental in such circumstances.

Senator HATCH. That's great. Ms. Roizen, how large of a problem are we talking about with regard to current software rental? Is it that big of a problem right now?

Ms. ROIZEN. We believe it's a huge problem. We believe there is probably one illegal copy of our product for every copy that we legitimately sell.

Senator HATCH. If you're wrong, and there is not much of a problem with software rental at this particular time, should we wait to see if such legislation is really necessary or needed?

Ms. ROIZEN. I think at that point it would be too late. I think it's very important to educate the consumer of computer products, who are in need to have our copyrights honored and protected and our need to be financially compensated for that. And if we wait too long, the industry will become sort of a de facto by virtue of the fact that it exists.

Senator HATCH. That's like saying that an author of a book that can be easily Xeroxed, if the laws weren't such as to protect him, that we will just wait and see if he loses a lot of money.

Ms. ROIZEN. Yes.

Senator HATCH. Then it's too late.

Ms. ROIZEN. Also, even if a small company like ours constantly plows the revenues we receive into future enhancements of the product, our market is very small right now, and it would be impossible for us to continue without the money that we generate from the sales of our product.

Senator HATCH. Well, I'm really convinced that this is a very crucial and necessary bill, and we're going to do everything we can. We hope your organization will get behind us on it and help us every step of the way.

Ms. ROIZEN. We certainly will.

Senator HATCH. We're going to need a lot of help, because, as you know, copyright matters are very difficult to get through the Congress. I've been fighting the Bern Convention and a whole raft of other issues this year, and we are real close to solving that problem, which in the future might have some impact and help you; but it isn't easy, and we need all the help we can get. So we appreciate both of you testifying. It's been very helpful to us here today, and it's been very, very good. Thank you both for being here. We appreciate having you.

Our next witness will be David Bradford, who is general counsel for Novell Corp. right here in Provo, UT. So if David is here—excuse me. He's not here?

He's on his way?

Why don't we move to Mr. Thomas Chan, then, deputy general counsel of Ashton-Tate Corp. for ADAPSO, and for ADAPSO, the Computer Software and Services Industry Association, Inc. Mr. Chan, we're delighted to have you here, and we look forward to

taking your testimony at this time, and we will turn the time over to you.

STATEMENT OF THOMAS CHAN, DEPUTY GENERAL COUNSEL, ASHTON-TATE CORP. FOR ADAPSO, THE COMPUTER SOFTWARE AND SERVICES INDUSTRY ASSOCIATION, INC.

Mr. CHAN. Thank you. Good morning. My name is Thomas Chan, and I am the deputy general counsel for Ashton-Tate Corp. I am here this morning on behalf of ADAPSO, the Computer Software and Services Industry Association, Inc., of which Ashton-Tate is a member.

I would like to thank you, Senator Hatch, for holding this hearing and soliciting the industry's input on this important issue.

Before I start my testimony, I would like to add a couple of comments to the issues you raised earlier to Dr. Ashton and Ms. Roizen. As far as expensive software goes, I've got a lot of reporters asking me this every time we do a case on software piracy. Aren't they doing a public good because your software is so expensive?

Software was expensive, but not anymore. Now you can find free software. You can find public domain software, so many that there are companies that try to organize the public domain software and resell them at a fee this time. You also have software that sells for less than $100; $99 software. Yes, there is $99 software around. There are also the standards of $400 to $700.

So I want to make it very clear that everyone understands that software is not expensive. It's only a matter of how much you want to pay, whether you want to pay for the more sophisticated versions. Do you want to pay more for it? Do you want to pay less for less sophisticated versions? Did you want to use it for home purpose? You can pay $99, or less, or you can get it for free.

The second point I want to also mention is about how easy it is to duplicate software. Computer, in a way, you can look at it—it's like a TV with a VCR attached free. Every time you have a computer, you have a VCR as well. So you can make the copy without even buying the VCR.

Now, let me begin my prepared testimony. I want to start with a brief description of ADAPSO, and I want to address the industry concerns with software piracy in general and end up with original software rental houses specifically. And then I will conclude by recommending that the industry and Congress work together toward a legislative solution using S. 2727 as its vehicle.

ADAPSO is the national trade association for the computer software and services industry. Its over 900 corporate members provide the public with a wide variety of computer software and services including software for micro-, mini-, and mainframe computers. Its members range from the smallest "mom and pop" software houses to the largest multinational publishers. Ashton-Tate is a leading developer and publisher of database and word processing software for microcomputers. Ashton-Tate employs over 1,000 people in the United States, with annual revenues exceeding $300 million. As such, ADAPSO and Ashton-Tate have a vital interest in these proceedings.

Although the extent of software piracy is extremely difficult to quantify, the attached Future Computing study conservatively concluded that in the United States alone there is one illegal copy made for each existing legitimate copy currently in the market. Other experts have estimated an even higher piracy rate.

Senator HATCH. So you're talking about one for one?

Mr. CHAN. One for one at least.

Senator HATCH. When somebody like WordPerfect or Ashton-Tate puts out a $500 product, for every one of those $500 sets that is sold, there will be another $11 set made?

Mr. CHAN. Yes; and in overseas market, it is even worse, from my personal experience.

Senator HATCH. In other words, Ashton-Tate and WordPerfect lose hundreds of millions of dollars because of illegal copying?

Mr. CHAN. Absolutely.

Senator HATCH. And illegal, unauthorized use of Ventura sortware?

Mr. CHAN. Yes. Correct. You seem to know the industry quite well.

Senator HATCH. That would cost us a lot of money here in Utah County, it seems to me.

Mr. CHAN. Yes; and in the United States. And it could even cost our leadership with the way things are happening overseas.

Senator HATCH. It could cost us the total world leadership that we have right now?

Mr. CHAN. It could. It could happen like the semiconductor chips. It could happen.

Senator HATCH. That's exactly what happened. We can maintain that world leadership if we have a level playing field.

Mr. CHAN. Yes. If we have the right legislative environment and the right legal environment to foster, continue to foster this world leadership.

Senator HATCH. If we don't, if we continue to allow this type of stuff to happen, you will have fewer companies that really want to take the startup costs burden to really do the necessary work, to do the really good programs that we have today or that we have the potential of doing. There would be a lot less entrepreneurship and innovation in this area and in America. That's in essence what happened to our computer chip.

Mr. CHAN. Yes. I've got calls from many software companies after, you know, the raids that we have conducted, calling me and saying, "Please do something about this." And I'm very glad you are champion of this issue.

Senator HATCH. Well, thank you. Keep going. I don't think people fully realize, and some of my colleagues don't always fully realize how really important this is. This is an area where we lead the world. We control the approaches in the world. And we should. We want to continue innovation. We want to make sure that people continue in these areas. We certainly want to provide the right for entrepreneurship in this area.

Mr. CHAN. Yes.

Senator HATCH. Here we have some university professors right here in this area. And then you look at Novell. You can tell another story. We're going to do that in a few minutes. We have uni-

versity professors who just decided to start a company because they have tremendous ideas that are innovatively sound, and all of a sudden they grow from zero to $100 million a year, growing upward exponentially because of ideas.

Mr. CHAN. Yes.

Senator HATCH. And you're doing this in California, Ms. Roizen, and all over the country, really. Many, many small countries are burgeoning and coming out of the woodwork to help us to become the technological superior country in the world.

Mr. CHAN. It isn't right when these companies start making some profit and being able to come up with a new release and new version. And then the rental pirates come in.

Senator HATCH. Sure. All right. I'm sorry to interrupt you, but I just want to make these things clear. This is a very important hearing. This is the hearing upon which this bill is going to be backed and based. I think the testimony we're getting here today shows how deserving this bill is of being passed, and we're going to see that this is disseminated among all Members of Congress so they understand. We're talking about American control of what really is one of the most important burgeoning industries in the world today.

Mr. CHAN. Yes. And also this industry is very unique. The technological advance is phenomenal. Every 6 months or a year companies come up with a new version, a new breakthrough; and we believe that rental without the publisher's consent or without return to the software owner will cost the consumer in terms of technological advances.

Senator HATCH. Well, it will cost them, because there won't be anybody doing this.

Mr. CHAN. Yes.

Senator HATCH. And actually, as companies progress and expand, consumer prices will come down as well.

Mr. CHAN. Well, right now it's already down.

Senator HATCH. Without——

Mr. CHAN. Well, there is free software now, and there is $99 software. In every category—you find this in database and word processing. Consumers have the choice. They can buy the less expensive ones, they can buy the very expensive ones, which they have to pay more, because they do have more features.

Senator HATCH. Novell and WordPerfect, to mention just two of our companies in this area, have a tremendous advantage in this area because of the ability to translate languages. I was very interested in Dr. Ashton's comments that they have translated their WordPerfect systems into a variety of languages right here, where we have probably the best center for the study and interpretation of languages anywhere in the world. So right here in America we're developing all kinds of materials for all over the world in different language forms, and we want to keep that up.

Go ahead. I'm sorry to interrupt you.

Mr. CHAN. No. You ask some excellent questions.

As far as piracy goes, we have quite a bit of experience in the last few years prosecuting pirates all over the United States and in Latin America and in Europe and in Asia. And we believe that for each illegal copy being sold in Asia, Latin America, Italy, and

Spain, probably 10 illegal copies are being made. And as I mentioned earlier, today's computer software market is intensely competitive. There are many companies in each market niche providing a variety of products with a variety of features at competitive prices. The pace of technological advance, both in quality and sophistication, is phenomenal and ever increasing. These technological advances and breakthroughs, however, are wholly dependent on continuing investment in research and development, which is becoming more and more expensive.

Ashton-Tate alone spent almost $30 million on research and development last year, and that does not include research and development that we funded outside the company. It is not unusual for a microcomputer software program to cost several million dollars to develop. This is before the product is ever introduced to the market and without any guarantees of commercial success. Bringing a product to market will cost just as much, if not more. Indeed, after spending millions to develop, many products are never brought to market, and the developers of others never recover their cost.

For many small companies, as Ms. Roizen has pointed out, it is becoming difficult to secure needed venture capital either to develop new products or to deliver a completed program to market. The importance of these small companies is critical to this industry. Today's industry giants were at one time small operations, garage outfits, which have achieved the greatest technological advancements. Furthermore, due to its unique nature, microcomputer software development, sometimes the software can actually be better accomplished by small companies or by small project teams. Thus, small companies are very important pioneers and developers of advanced software technology.

Software piracy threatens the revenue stream needed by both large and small companies and thus jeopardizes continuing advances in this young industry. Conceivably, piracy could one day threaten the current U.S. world leadership in software technology. Without the continuing injection of R&D dollars, this industry may well stagnate and eventually lose its edge in the world marketplace, as you know, one of the few areas showing a positive trade balance.

The emerging proliferation of software rental shops is causing renewed concern about software piracy, especially in light of what is happening in our neighbor, Canada. There, the software piracy problem was so bad that it took concerted efforts by the industry, Ashton-Tate, and the Canadian Government over 3 years to shut down the pirates, only to find the same pirates reincarnating themselves as software rental outfits. For example, Crazy Irving, one of the most notorious pirates in Canada, was finally prosecuted for software theft and fraud late last year, early this year. Within 24 hours, Crazy Irving reopened its door, this time "renting" software and openly challenging the software industry and government to action.

Senator HATCH. He is not alone. There are others as well.

Mr. CHAN. He is not alone. He is the most notorious. You can find Flopsoft. You can find Microcom and others in Toronto, in Vancouver, in Montreal, all over Canada. And it costs us a lot of money, a lot of time, to shut him down.

Senator HATCH. And the minute you did, he started up again under a rental program.

Mr. CHAN. Yes. And currently today the law doesn't give us a lot of leeway to prosecute these pirates. And the United States, as you know, there is a loophole in the U.S. copyright law that allows—encourages these pirates to structure themselves as rental outfits. And we now have stores such as Computer Mania in San Diego, which is what I would call Crazy Irving alone. They're starting the same thing. Some are even beginning to franchise themselves and boldly advertise in trade journals. These are simply operations, software rental operations. This is causing increasing alarm about software piracy. And we have begun to achieve some success in stopping illegal copying in the United States and Canada. We are slowing down our piracy elsewhere.

However, rental pirates will not only deal a serious blow to the industry and government efforts to fight piracy in the United States. The rental pirates will no doubt encourage other pirates in countries like Korea and Italy and Saudi Arabia to follow suit and wipe out the legitimate software market.

Senator HATCH. Mr. Chan, if I can interrupt for a second, I'm going to have to run to this funeral. I really apologize to you, Mr. Burton. This is Craig Burton, who is the executive vice president of Novell Corp., who will testify immediately following Mr. Chan.

So I'm going to ask my counsel on the Judiciary Committee, on this subcommittee, Kay Morrell, who was himself educated in this valley, to continue to take down all of the testimony, which is very important to our needs back there, and to ask the questions that I have asked him to ask before we're through, so we can establish this record.

So if you'll forgive me, I just didn't know what else I could do. I want to go to my aunt's funeral. Ordinarily I'd be right here and listen every second. But I've read what you had to say, and I will continue to follow up on this, and we'll push this with everything we have. We think it's long overdue. Your testimonies are crucial to the successful culmination of this bill, and we'll do what we can to see that it gets through, if not this year then certainly during the next Congress.

Thank you. If you'll forgive me, I'd better leave.

Mr. Thompson and Dr. Ashton, I'd like to see you, if I could, for a moment.

[Senator Hatch leaves the hearing.]

Mr. MORRELL. Please continue, Mr. Chan.

Mr. CHAN. The recording industry suffered serious and unnecessary losses before the enactment of the Record Rental Amendment of 1984. I predict that the losses to the software industry will far exceed those of the record industry because of the advances in software technology. Private duplication of analogue records, as Ms. Roizen pointed out earlier, cannot achieve the same quality as the original; but private copying of digital software does not cause any deterioration in the performance of the computer program.

Furthermore, no one really rents software to perform some data processing and then to return the original software without making a copy. To do so would be like creating a bunch of files, locking them up, and throwing the key away. Thus, any reason for

connecting the record rental amendment would be even more valid for adopting the computer software rental amendment act. Any delay now in stamping out software rental without authorization of the copyright owner will cause the software industry more harm than record rental has caused the record industry. And for the software industry, the harm can be irreversible.

The passage of the proposed software rental legislation not only will affect the U.S. marketplace, but will also positively influence the decisions of legislatures around the world to enact legislation similar to ours to protect the investment of software developers. In almost every case, a foreign legislature which is contemplating passing its first software protection law will look upon U.S. copyright law as a model. What you cannot find in the software copyright law will invariably be missing in foreign legislation as well. Most nations know that the U.S. copyright law has been crucial in fostering the development of the world leadership of the U.S. software industry. Thus, the passage of the proposed software rental legislation would encourage other nations to follow suit and strengthen the ability of software owners to combat the serious piracy problems abroad. Since U.S. software dominates foreign markets, this bill will ultimately contribute to our balance of trade.

The time to act is now, not after this industry has suffered unnecessary and perhaps irreversible losses, and before the United States becomes the software pirate capital of the world. The problem of software piracy is a difficult and serious one, both for this industry and the U.S. balance of trade. It is a problem that has begun to offer some hope for solution, but that hope is being threatened by software rental. The time is now critical for Congress to act. ADAPSO and its members would welcome the opportunity to work with all concerned parties to develop an equitable solution to the problem.

Again, I thank Senator Hatch and subcommittee for the opportunity to voice our concerns with software rental. Thank you.

Mr. MORRELL. Senator Hatch had one more question he wanted to ask. In your statement you referred to this bill as a legislative vehicle to be used to reach a solution for the software rental problem. Are you suggesting there might be the need for some changes in the bill before it is enacted by Congress?

Mr. CHAN. Well, we would like to see the reference to licensee deleted from the bill, because section 109 of the software code doesn't talk about licensing. All of these issues relating to licensee can be addressed through the contract between the copyright owner and the licensees themselves. So we believe the reference to licensees will only cause unnecessary confusion.

I understand why the language was inserted in the first place, but I believe that it will only cause more confusion than what it will achieve.

Mr. MORRELL. Thank you. Let's turn now to Mr. Burton, the executive vice president for Novell Corp.

STATEMENT OF CRAIG BURTON, EXECUTIVE VICE PRESIDENT, NOVELLE CORP., PROVO, UT

Mr. BURTON. Senator Hatch—who isn't here—I'm sorry that he had to leave for a funeral—friends, ladies and gentlemen, my name is Craig Burton. My position is that of executive vice president and general manager of Novell Software Group. Novell is a publicly held corporation whose worldwide corporate headquarters are located here in Provo. My responsibilities include directing Novell's corporate marketing functions and Novell's product development, and setting long-term development strategies and marketing of software.

I joined Novell in 1981 and have served both as a director of marketing and vice president of marketing there, and now as executive vice president—or, previously executive vice president for corporate development, before being promoted to my present position.

Novell is involved in the highly competitive segment of the computer industry known as the local area network marketplace. And in the past few years local area networks have gained broad-based acceptance in American business. According to one survey, LAN sales in 1987 reached $1.8 billion, an 80-percent increase over the sales of the year earlier, making it one of the fastest growing markets and high technology in the world. It has been predicted that by 1992 local area network will be a $3.3 billion industry.

The local area network marketplace has increased in popularity due to the need to create, store, and move information easily and transparently from one personal computer to another in any company location. Industry experts testify that the number of installed personal computers reached somewhere between $15 and $16 million in 1987 and believe the total will grow to $22 million by 1991, and those may be conservative.

Novell's network operating system makes it possible for these personal computers to communicate with each other and share peripheral devices. The low cost of these used in local area networks makes them a very popular choice in selecting data processing alternatives.

The leader in this rapidly expanding PC LAN market, I'm happy to say is in Provo, and whose network operating system is established as a de facto industry standard. Today there are more than 220,000 copies worldwide and somewhere near 2 million users.

We're shipping now on an average of around actually 15,000 copies of network per month, and the average price is around $3,000 per copy.

For the user, network-based computer systems offer computing power previously only available in minicomputers and miniprints.

Novell has achieved a significant growing position as marketing one of the best computer software programs built in the United States.

Novell's rights to prominence in the computer software industry came after a long, hard struggle; and Novell was begun in 1980. In the first 3 years of operation, some $8 million were spent in development of this product. In 1983 Ray Noorda became president of the company and insisted in focusing the company's efforts in marketing and creating the software product, which would effectively

compete in the computer industry. That effort was assisted due to development carried out by four programmers from Brigham Young University when they wrote the beginnings of the software code known as NetWare.

As has been testified this morning, there is a software rental business now getting underway in the United States and in Canada and in other parts of the world. This business threatens to undermine the computer software industry, and particularly as it relates to software for personal computers. Because of the ease of duplicating software diskettes, the issue of copyright infringement is being fought by Novell and many other companies on a worldwide basis, and because of the perceived value of Novell's network operating system, instances of software piracy are on the increase.

The software rentals make our product really available for duplication. This has been testified. It would be a serious blow to our ability to license and collect fees by legitimate users of the product.

There is a great incentive to rent software in order to avoid actually having to purchase a copy. If this practice became widespread, Novell would no longer have the incentive or ability as it has to date to create new and upgraded products. The intellectual property laws in this country, and particularly the copyright act, provide the copyright owner a reasonable incentive to create new technology.

If this incentive is taken away by the proliferation of rental companies, not only would companies like Novell, WordPerfect, Lotus, and Microsoft, as mentioned, be hurt; but the competitive stature of the United States on the world markets would be traumatically affected, we believe.

At the moment, the computer software industry is one place in which the United States remains highly competitive in a leadership role. The adoption of this amendment to the Copyright Act would assist software companies located in the United States in maintaining their competitive position on worldwide markets.

It should be mentioned that the negative impact of the software rental business on a company such as Novell could be potentially much greater than it is on those other companies from which you've heard today. While WordPerfect software package has a suggested retail price of $495, Novell's software products sell for as much as 10 times that amount.

The average selling price, as I said earlier, is around $3,000. The most expensive version of NetWare can be in the area of $30,000. Thus, each time someone rented software and made a copy for their own use without paying Novell a licensing fee, the company's revenue will be severely impacted in a negative fashion.

It is Novell's desire to improve and update its product line to maintain its competitive position and to continue to invest in the research and development necessary to accomplish this. We also have a worldwide support organization, which is very expensive to maintain. Hence, the price of the software.

The loss of revenue which could be experienced due to widespread software rentals could have a very negative influence on the space part of our business, as well.

Novell currently employs approximately 800 people in Utah County and 1,500 people on a worldwide basis. On their behalf and

to help maintain the competitive stature of the U.S. software industry, we urge you and your committee to enact S. 2727.

If there are any other questions I can answer, I'd be happy to. If not, thank you for your time this morning and the opportunity to speak out on this important issue.

Mr. MORRELL. Mr. Burton, Senator Hatch wanted me to ask you. The computer industry has found that copy protection practices which limit unauthorized copying are impractical, because there is a legitimate need for backup copies by purchasers of computer programs.

Now, how does Novell deal with this backup issue, and how do you feel this legislation will affect that practice?

Mr. BURTON. The way we deal with the backup is that we allow the user to back up the software on diskettes, but require a physical card or a piece of hardware that protects our software. We believe that, which actually ends up being a deterrent for us to be able to have the number of sales that we possibly could have because of the maintenance and update on this piece of hardware that protects our software. We think that this act could help us to be more competent to remove that hardware and to protect the software that we're manufacturing and trying to develop.

Mr. MORRELL. In your testimony you mentioned that Novell and many other companies on a worldwide basis are fighting copyright infringement. Are there any other countries that have taken steps similar to S. 2727 that you know of?

Mr. BURTON. Not that I know of. Japan?

Mr. MORRELL. What other alternatives to this legislation would you suggest to combat the software piracy?

Mr. BURTON. Well, I don't know anything I want to add to it, but I think that I would like, as Mr. Chan mentioned, to deal with the licensing issue and also this rental problem and to make that very clear that that's not an opportunity for companies to take advantage of.

Mr. MORRELL. The committee would like to thank the witnesses today; and the record will be left open for approximately 3 weeks, if anybody has any further written statements that they would like to submit for the record.

The hearing will stand adjourned until further call of the Chair.

[Whereupon, at 10:21 a.m., the subcommittee adjourned subject to the call of the Chair.]

APPENDIX

ADDITIONAL SUBMISSIONS FOR THE RECORD

August 25, 1988

Mr. Kay Morrell
135 Senate Russell Building
Office of Senator Orrin Hatch
Washington, DC 20510

re: S.2727

Dear Mr. Morrell,

I spoke with Jim Rosenvall who suggested that I write you.

Pursuant to Senator Hatch's meetings yesterday with Utah software concerns, we would like to submit the following information for inclusion in the testimony given regarding the rental of computer software.

Electronic Text Corporation publishes not only software, but also electronic versions of text which run with that software. Examples include The Riverside Shakespeare, The Mississippi Writings of Mark Twain, and many others. I have attached a list for your review. This data is currently distributed on floppy disks, and is therefore vulnerable to copying. We need legal protection of our data, which is the basis on which our business is founded.

We would therefore suggest that the language of Senate Bill S.2727 be amended to include language that, with the exception of libraries and educational institutions, would prevent the rental of not only computer programs, but also any data which can be stored electronically.

The process of transferring data from printed to electronic form is an expensive and complicated process. Once data is in electronic form, it is infinitely more simple and inexpensive to copy than printed material, and the result is of much higher quality. For instance, if a person rents a book, making a photocopy is both costly and the end result is inferior to the source document. When copying electronic data, there is no difference between the source and the copy.

If you require any further information or clarification, please do not hesitate to call.

Thank you.

Sincerely,

James W. Johnston
Executive Vice President

cc: Alan Ashton

(27)

ELECTRONIC TEXT CORPORATION

WORDCRUNCHER BOOKSHELF SERIES
(September 1, 1988)

TITLE	PUBLISHER
The Riverside Shakespeare	Houghton-Mifflin
Ralph Waldo Emerson, Essays and Lectures	Library of America
Mark Twain, Mississippi Writings	Library of America
Henry David Thoreau	Library of America
Herman Melville	Library of America
Walt Whitman, Poetry and Prose	Library of America
Henry James, Literary Criticism	Library of America
Jack London, Novels and Stories	Library of America
Benjamin Franklin, Writings	Library of America
Thomas Jefferson, Writings	Library of America
Nathaniel Hawthorne, Novels	Library of America
Holy Bible -- New International Version	Zondervan Press
Holy Bible -- King James Version	Electronic Text Corp
The Constitution Papers	Electronic Text Corp
History of the Church	Electronic Text Corp
Teachings of the Prophet Joseph Smith	Deseret Book
Jesus the Christ	Deseret Book
Articles of Faith	Deseret Book
Lectures on Faith	Deseret Book
Personal Writings of the Prophet *	Deseret Book
Miracle of Forgiveness	Bookcraft
Mormon Doctrine *	Bookcraft
Utah Code	CodeCo
Arizona Code *	CodeCo
Maize Diseases *	APS Press

* Not yet released.

August 26, 1988
Salt Lake City, Utah

Senator Orrin Hatch
Wallace F. Bennett Building
3438 Federal Bldg.
Salt Lake City, Utah 84138

Dear Senator Hatch:

I sure wish I had known about the hearing concerning computer software rental which was held a few days ago because I could have offered some interesting insights from personal experience. I own a computer store where we successfully and honorably rent computer software on a regular basis. I also happen to be a software author and desire strongly to protect the software industry like you do. Renting software honorably and protecting the software industry are not mutually exclusive as the article in the Salt Lake Tribune of Thursday August 25, 1988 (Section C, p. 1) implies.

Being a strong and responsible supporter of the Constitution I have become an ongoing member of the National Center for Constitutional Studies directed by Dr. Cleon W. Skousen and was also a proponent of President Reagan for Vice President under George Bush (see enclosed article from Page A1 of Deseret News July 28, 1988). I also am a strong supporter of you-- as I believe you truly reflect the ideology of the Constitution which made America great. I also authored the Commodore computer version of the 'We the People' game-- which is a take-off of the IBM version-- both of which are now being sold by the National Center for Constitutional Studies. I also own the rights to several excellent selling programs such as Jenny II the Genealogy program. Because of these above qualifications, plus the fact that I graduated from the University of Utah in Behavioral Science and later obtained a M.S. in Health Education, and also worked at Stokes Brothers computer department for a while, I feel that I understand the psychology of software pirating and software economics better than most people.

To begin with, I totally agree with the idea of keeping dishonerable rental companies from renting software simply for the sake of letting people copy it. We both know that this undermines the industry. However, I also believe that the customer should have a right to know what he or she is buying-- prior to purchasing it. Many years ago when I was selling software at Stokes Brothers, I noticed that sometimes the nicest packaged programs were very inadequate and misrepresenting and a cause of great dissatisfaction to the purchasers. Yet, I found that it was usually impossible to adequately demonstrate in a few short minutes the advantages and disadvantages of each program. Also, each individual

purchaser has differing needs which are often hard to explain and analyze in a busy store setting. The obvious and successful solution was to make the software available to the customer on a rent-to-own basis.

Since instituting this policy several years ago, I have faced some criticism by people claiming that our sole intention is to facilitate software piracy. This could not be further from the truth. Unfortunately, I do know of software rental stores who do encourage software piracy and who make a bad name for those of us who go to great effort to screen and implement policies which protect the industry. I also want to add that I have personally terminated many of my best rental customers when I received substantial evidence that they had pirated software. This has served notice to my other customers that I mean business.

We intentionally structure our rental fees to encourage the purchase of the software which has been rented by renting the programs out on a weekly basis instead of a daily basis. Some of my rental competitors charge $3 per day whereas we charge $7 PER WEEK. Our way the person isn't inclined to just take the program home, copy it, and return it the next day in order to avoid paying the outrageous $21 per week. After the first week our rate drops to only $1 per week! This encourages them again to take plenty of time appreciating the qualities of the rented programs. Then, we allow the person renting the software to apply all of the rental fee towards the purchase price. This also acts as an incentive for purchase.

Quite often, I also find myself giving speeches stressing the importance of supporting the industry. I often refer to the software industry as the 'goose that lays the golden eggs' which we want to protect. I also emphasize to my customers the philosophy that something stolen or unearned is something which is usually unappreciated. It is only by legitimately and honorably acquiring something that one will really appreciate it. The hoarding mentality of software pirates-- most of whom don't appreciate and fully utilize that which they have stolen-- is totally different from the mentality of those who are productive with what they have because they acquired it legitimately. If the ingenuity which many of these software pirates employ were utilized in a productive direction they would be more successful and honorable. In reality then, most people realize that when you cheat you are mainly just cheating yourself and your own future. The end result is that my customers are almost always understanding and sympathetic toward supporting the industry.

Also, I have noticed that we sell more programs at our store than almost any other computer store in Utah. I strongly feel that paranoia often becomes a self-fulfilling prophecy. It is because I really care about my customers that they care about supporting my store and protecting the

software industry.

I also want to point out that I do feel strongly that any software manufacturer which doesn't want their programs rented should be entitled to have their wishes respected. Many months ago when I found out that WordPerfect Corporation didn't want their programs rented, I immediately stopped renting WordPerfect because of their wishes. I have similarly stopped renting a few other lines also for similar reasons. The point I would like to emphasize here though is that sales on these items which I have been required to stop renting have dropped dramatically. What is happening is that people rent and buy other programs instead! Renting actually helps sales increase-- if done honorably! People like what they are familiar with! I have noticed about a seventy percent decline in the sales of the items which I can no longer rent! I think it is important for software companies to realize this phenomena!

We also face the fact that those who are determined to cheat the system will probably succeed anyway, and that the regulations only punish and inhibit the honest. I personally believe that the vast majority of Utahns are very honest and hardworking people. It is unfair to assume that they are cheaters as the Tribune article presumes!

Another point needs to be made on behalf of the consumer also. This point is that some software manufacturers really charge unreasonable prices for their programs. Although I believe that a company has a right to set their prices wherever they want to, many of these programs which sell for hundreds of dollars actually ENCOURAGE software piracy. After studying economics at the University of Utah, I can guarantee you that the higher the price of a program the higher also will be the ratio of pirated copies to purchased copies. Unrealistically high priced software actually exploits the honest customer who realizes that if the price were lower and more fair a large percentage of those who were pirating it would probably have purchased it. He would not, therefore, be subsidizing the large number of people who prefered to steal it at the higher price. I personally detest the fact that in this situation the industry actually exploits the good nature of the honest consumer rather than evenly distributing the burden by encouraging increased honest sales through lower pricing-- especially when the additional cost of producing extra copies is so low compared to other industries. I can't imagine that the actual cost of materials for additional copies would amount to more than a few dollars per package for most software. Good quality disks can now be purchased in bulk for less than fifty cents each. Printing and packaging also are subject to economies of scale which actually make each additional package more affordable. The honest customer feels like a sucker knowing that a good portion of his high software bill is going to pay for those who would have shared the bill if the price had been more reasonable! It is almost

reminiscent of our current unfair tax system which actually encourages evasion because of unfairness-- resulting in the honest people carrying a disproportionate load. People will usually pay a fair price. People want to be treated fairly.

It is the poor economic thinking of many of these software companies which encourages piracy. What happens in many of these software companies is that they calculate how much a program cost them to produce, and then add in their other business costs and then add in a healthy mark up and then divide that total by the number of copies which they project to sell. As a result they end up with a very high shelf price which encourages piracy. From the point of view of sound economic thinking the developmental costs must be viewed as SUNK costs which SHOULD NOT be used to calculate the shelf price. What the software company needs to do is to forget the sunk costs and instead concentrate on formulating their prices based upon how they can MAXIMIZE PROFITS! Its funny how these big corporation economists forget simple principles of profit maximization once they get out of college! If they would think along these lines they would realize that maximizing profits involves keeping the ratio of pirated to purchased copies low by implementing realistic pricing.

Also, in regards to eliminating software piracy, I think that more attention needs to be paid to the vast networks of software pirate BBS's (modem Bulletin Board Services). There is literally a coast to coast network of software pirates who use the telephone lines to transmit copyrighted programs to their pirate friends often for profit! These large scale operations are often operated by adults, not just misinformed little boys. Oftentimes these pirates actually 'freak', or in lay terms, electronically manipulate the telephone system into getting free long distance calls by using MCI or some other long distance phone carrier's computer long distance codes to defraud the telephone company. Very little, if anything is being done to combat this major problem. I have personal knowledge of individuals doing this which I have reported to the FBI, telephone company and other departments with little help. I would think that someone in these organizations would be interested in investigating these reports-- but I have been greatly disappointed. Some of my customers tell me that some of these 'Pirate Boards' actually receive illegitimate copies of programs via the nationwide pirate networks long before they were even available for legitimate purchase in Salt Lake City!

Also, there are other dealers in Salt Lake-- and I'm sure in other cities also-- who like to sell the hardware so much that they will actually throw in pirated copies of valuable copyrighted programs whenever someone purchases a computer system. I believe that this situation needs investigation also. It certainly is not fair to reputable dealers, like myself, to have to compete with those who like to spice up their hardware deals in such a manner.

Another behavioral phenomenon which exists with software pirates is that they view protectionism of software as a game! Yes, like a game of chess. If the software industry tries to protect itself in one way they will counter with a move which will almost always outsmart the industry. The problem with playing this cat-and-mouse game with software pirates is that they are usually very very intelligent individuals with high I.Q.'s and low morals. As a result you tend to get into a no-win situation with them. They will always have a comeback. This only points up what I consider to be the most satisfactory solution to the whole mess which is educating the public with moral values. What needs to be done is to start again teaching values in the public schools. I'm not espousing any particular religion, but just teach the importance of honesty and fairness and integrity. By neglecting these principles in our society we end up fighting these no-win battles against individuals with high mental I.Q.'s and low morals.

At our store we are always on guard for behavioral attributes of software pirates among those who we rent to. For one thing, software pirates usually like to brag to other people about how they got away with pirating a particular program. Inevitably word will come back to us via the grapevine. Also, pirates usually never buy anything they rent. Honest people will usually purchase between 30 to 70% of the merchandise they rent. Honest renters also will often rent the same program more than once. A software pirate rarely has a need to rent the same program more than once since he presumably already has a pirated copy of it. I am not so naive or dishonest as to profess that no person has ever gotten away with pirating something which has been rented from us, but we have also made converts out of a good number of former software pirates. Many of these former pirates have also purchased original copies of their pirated programs from us after realizing what they were doing to the industry. By offering good prices, selection, service, and expertise we find that most people prefer to play by the rules rather than to risk the loss of such privileges. Our customers recognize that the disreputable dealers and pirate sources are transient by their very nature and cannot be depended upon as a secure source without disruption. As a result they desire and seek more reputable sources anyway. Granted, some Americans are short term minded-- but I still think and hope that the vast majority are more sophisticated in their thinking. Afterall, computer users are by their very nature usually success-minded people who have sophisticated minds.

Also, I believe that a differentiation needs to be made between types of software. Computer games tend to have transient enjoyment. Once a game player has completed a game it often just sits on the shelf gathering dust. When I worked for Stokes Brother's computer department I noticed how many parents were so frustrated because one week Johnny wanted to buy Pac Man for $30 and the next week Johnny wanted

something else for $30 because he was bored. Good parents, many of whom wanted to keep Johnny away from the evil influences of the Arcades were buying computers to keep Johnny home and it was bankrupting them. This is another reason I began renting. I felt it taught conservation and frugality and helped many parents to help their families stay away from the video arcades where drugs and other unhealthy influences flourished.

Therefore, I feel that distinctions should be made between different programs. I'm not sure that PAC MAN and WordPerfect should necessarily be lumped into the same category when assessing the desirability and legality of renting. This is because WordPerfect is probably going to be used for many months or years whereas most games are used in a more transient manner. Not to mention the fact that most games are usually copy protected whereas most business software isn't-- because most businesses are willing to abide by copyright laws rather than risk lawsuits from software companies. Businesses also usually pride themselves on their image. Can you imagine how unprofessional it looks to use pirated software and photocopies of manuals!

I do believe that a special copyright notice should appear on any package that any company does not want rented. I certainly would feel morally and legally obligated to adhere to such a notice. Renters would also immediately recognize whether they were renting legitimately. No honorable individual would set a bad example for his family by bringing home rented items which were clearly marked 'NOT FOR RENTAL'. But don't punish those manufacturers who may want to benefit from increased sales by having their programs available for rent. Such companies may prefer to use copy-protection schemes which make disk copying very difficult and to allow people to sample their product in the hopes that it will increase their sales. This is definitely a realistic possibility, as I have proven at my store by my brisk rate of sales AND rentals.

One area of rental that I personally have not gotten into because I feel that it presents the 'appearance of evil' is mail order renting. This form of renting could potentially be very profitable, but I feel that it is too hard to screen out software pirates. My customers have to look me in the eye occassionally, and they know how much I dislike software pirates.

Another new questionable phenomenon which has arisen is the sale of "archival backups" through the mail. Although we will make backup copies of copyrighted disks for our customers, we will do so only if they furnish us proof that they have purchased an original. This usually requires a sales receipt or a box or a defective original disk. I think that too many of these companies which sell backup copies through the mail totally disregard the rights of the authors. The same is true with other companies who sell backup copies

of documentation. I rarely run into a legitimate customer who has actually lost his documentation. Ninety-five percent of those wanting to photocopy documentation at our store are turned down because they cannot show any evidence that they have purchased an original.

Other problems also arise with pirates marketing copyrighted software as 'public domain'. This is becoming an increasing problem. We sell public domain software at our store, but we find that nearly one third of the programs which we purchase as public domain ends up to actually be copyrighted material which someone has either deleted the copyright notice or disregarded it. We are careful to not market any of this copyrighted software.

I also believe that it should be alright to develop and market software which is similar to another company's software, as long as the actual code is not borrowed from the originating company and the similarities are not exact. If it can be proven that actual programming was stolen, then prosecution should occur.

We also are very careful not to rent or sell copy-programs in a manner which implies that we encourage pirating. In fact, we don't even keep copy programs on our store shelves. They are available only to those customers whom we know and trust. I'm certain that many other rental companies probably aren't this cautious.

Last, if necessary the government may consider a 5 cent per disk tax on blank disks which could be used to help enforce software copyright laws. I think this should be a last resort however because it involves another federal bureaucracy and higher taxation.

I think that the above considerations have serious merit and should be contemplated before taking actions which may hurt those honest customers and dealers who are in jeopardy of being punished because of those who ruin it for everyone. We need to do something to protect the industry, but I'm afraid that it will once again be the honest people who will suffer the most, while the dishonest will simply find another way to beat the system.

I think the best approach is to let each manufacturer have the option of whether to allow their programs to be rented, and then to clearly mark on each package whether or not they want their merchandise rented. This way those who decide to allow their programs to be rented will have increased sales-- especially if they can innovatively find a good protection scheme for their programs. Let each manufacturer decide what is in his own best interest! Even if your proposed amendment to the copyright law does not become law for one reason or another, you may still want to recommend this course of action to those companies which are disturbed about the possibility of their programs being

rented. Again, I'm sure that most software outlets would be reluctant to rent programs which the manufacturer clearly marked as 'NOT FOR RENT'. Even if a few dealers continued renting out software that was clearly marked 'NOT FOR RENT' they would be jeopardizing their reputation and source of supply. In fact, part of the warning on the package might involve a reward for information about violators which could result in termination of product supply. Also, a short explanation of why the manufacturer feels that it is detrimental for people to rent software might also be appropriate to attach to the package and/or instructions. I think that most people are willing to assess the merits of a persuasive argument. The rental company's improbability of allowing such a clearly marked package to be rented combined with the unliklihood of most individuals wanting to set a bad example for their family and risk their own personal reputation and possible embarrassment from others results in only a very low probability that such a request by a manufacturer would go unheeded.

I'm not sure that any policy more strict than this is very realistic anyway. The few who wouldn't comply voluntarily with my plan would probably be the same few who would violate your proposed amendment anyway. I offer you my proposal as an alternative to the likely endless amount of litigation and evasion which might result by trying to force the issue. Certainly strong arguments might be made in court regarding the constitutionality of not allowing someone to rent something which he has legitimately purchased--especially when a very similar media (namely the video tape media) rents constantly with impunity. The whole thing could result in massive evasion and costing the already overburdened taxpayer much more expense as the government tries (possibly in vain) to enforce such a law. Not to mention the effect which this would have on increasing the burden on our already overburdened judicial system. I think as a nation we need to get back to voluntary compliance based on personal honor-- and away from the I.R.S. Gestapo mentality, or we may have as much noncompliance with copyright laws as we have with tax laws..... heaven forbid!

Most importantly however, I think we need to get big government out of every little private affair of business. We need to place a higher emphasis on value and ethics education instead of legislation. Otherwise we will only end up with total government intrusion into our lives.

Once, a reporter asked Joseph Smith, the Mormon leader, how he kept control over the large number of Mormons who were under his direction in Illinois. He responded: "I teach my people righteous principles, and let them govern themselves." I think our federal government could take a lesson from that concept.

I hope you don't mind, but I will be making copies of this open letter available to several hundred of my renting (and

non-renting) customers for their analysis and insights as well as possibly sending a copy to different computer magazines, newspapers, and computer users groups. I want to hear their opinions. I feel that too often decisions are made without the public voicing their concerns. If you want me to distribute other literature which might be used by these individuals to form opinions I will be happy to distribute it also. I want to work together to come up with a social policy which is truly well conceived to benefit the software industry and the public alike.

Sincerely,

Reid C. Swenson

Reid C. Swenson, M.S.
Owner, Computer Bargain Store
3366 South 2300 East
Salt Lake City, Utah 84109
(801) 466-8084

COMMENTS OF JAMES U. JENSEN
AND KENT J. WALLIN OF
WOODBURY, BETTILYON, JENSEN, KESLER AND SWINTON, P.C.
ATTORNEYS
SALT LAKE CITY, UTAH
IN SUPPORT OF
SENATE BILL 2727
KNOWN AS THE

"COMPUTER SOFTWARE RENTAL AMENDMENTS ACT OF 1988"

We are pleased to add our voice in support of passage of the referenced legislation.

The protection of software interests is of vital importance to our community and to our nation. From time to time in the development of our country's experience in this field, technology has advanced more rapidly than the body of law established to protect interests of various parties. Such is the case with software. Over the years, software developers and users have struggled with the mix of interests in software protected by patents, trade secrets, and copyright. Software development has now advanced to the point where billions of dollars are spent on the development and use of mass marketed software. In the early days of the software industry, development companies pursued elaborate schemes to prevent unauthorized copying. In today's fast moving marketplace, such elaborate schemes are an impediment to the legitimate use and efficient distribution of such software packages. Accordingly, many companies have eliminated so-called "copy protection" features from mass-marketed software.

The provisions of the Computer Software Rental Amendments Act of 1988 are intended, legislatively, to overcome the so-called "first-sale doctrine" which historically has provided that a purchaser of a product, even a copyrighted product was at liberty to use that copy as the owner of the copy saw fit including the rental thereof. The provisions of this legislation will allow owners and licensees of software the option to facilitate rental of software, but will allow other owners and licensees to prevent or prohibit such rental.

This rule is desirable because it is the least evasive method available to assure for developers the value of their efforts in producing mass marketed software products. For that reason, we support this legislation.

Mr. James U. Jensen is a recognized authority in the area of computer software. He has taught a course on computer law at the University of Utah, was former general counsel of Dictaphone Corporation in Rye, New York, and is currently the Legislative Coordinator for the Utah Advanced Technology Council. He has written and lectured broadly on computer issues and has previously testified in the Utah legislature concerning Utah's adopted amendments to the computer crime legislation adopted recently by the Utah Legislature.

Mr. Jensen is a founding partner of Woodbury, Bettilyon, Jensen, Kesler & Swinton, P.C. where his practice focuses on the representation of software and other high technology interests. He is a graduate of the University of Utah and holds JD and MBA degrees from Columbia University in the city of New York.

Mr. Kent J. Wallin is an associate attorney with the law firm of Woodbury, Bettilyon, Jensen, Kesler & Swinton, P.C. in Salt Lake City, Utah. He is a graduate of Brigham Young University and the University of Utah and holds degrees in accounting, business management, federal income taxation and law. Following graduation from law school, Mr. Wallin earned his CPA license while employed with Coopers & Lybrand in its San Francisco Tax Department.

JUJ\COMPUTER

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News Release

CONTACT:
Dr. Joe Curry, Senior Analyst
Future Computing Incorporated
8111 LBJ Freeway
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FOR RELEASE ON OR AFTER JANUARY 17, 1985

FUTURE COMPUTING SURVEY: INSTALLED BASE OF BUSINESS SOFTWARE FOR PERSONAL COMPUTERS 50% AUTHORIZED COPIES, 50% PIRATED

Dallas--Future Computing Incorporated, the leading information services firm specializing in the personal computer industry, disclosed today the results of an independent study of business software piracy.

Basing its estimate on 45,000 responses to a questionnaire mailed to approximately 70,000 households, Future Computing believes that there is one pirated copy of business software in use for every copy authorized by the publisher.

This figure includes unauthorized use of "backup" copies provided by the software publisher as well as unauthorized duplicates made by the purchaser. Future Computing regards the 50% rate as a conservative estimate of the level of software piracy in the personal computer marketplace.

Portions of the survey results are included in these reports from Future Computing Incorporated: Office Personal Computer Software Markets and Office Personal Computers: The Customers.

The survey, which focused exclusively on business software for personal computers, looked at 12 top packages ranging from the inexpensive PFS:File to such premium-priced software as Lotus 1-2-3. Included were accounting, data base, word processing, and spreadsheet software.

Some of the products analyzed have a copy-protection feature designed to thwart unauthorized duplication; others do not.

Future Computing's research was conducted in cooperation with the Software Protection Committee of ADAPSO (the Association of Data Processing Service Organizations) and 11 publishers of business software for personal computers.

Using the results of the mail survey and Bureau of Labor Statistics employment figures, Future Computing projected the total number of copies of a given title — whether authorized or not — in use in the U.S. work force as of the end of July 1984.

Those software publishers cooperating with the study reported the number of copies of their product authorized and sold by the end of July 1984.

The difference between the survey result and the publishers' data indicates the level of piracy.

To ensure that the survey counted the number of copies rather than the number of users, researchers took into consideration sharing of software by two or more workers and use of the same piece of software by one person both at work and at home.

The research indicated that current copy-protection devices are ineffective: copy-protected software is pirated at almost the same rate as unprotected software.

According to Future Computing, piracy cost the business software industry $1.3 billion in lost revenues between 1981 and 1984. Assuming that approximately 25% of the unauthorized copies represent packages that would have been purchased — a conservative estimate — the revenue loss in 1985 will be $.8 billion more.

Future Computing Chairman Egil Juliussen emphasizes the global outlook of the piracy research. "The guiding principle of our

investigation has been that unauthorized copying of business software is a critical issue for every firm in the personal computer industry. Our research doesn't simply serve the interests of some particular software publisher or even a specific group of publishers. Instead, we've provided the industry as a whole with a thorough, independent assessment of the problem. It should be the starting point for an industrywide search for solutions.

"Software publishers provided vital data to support this investigation, but they did not sponsor the research," he explains.

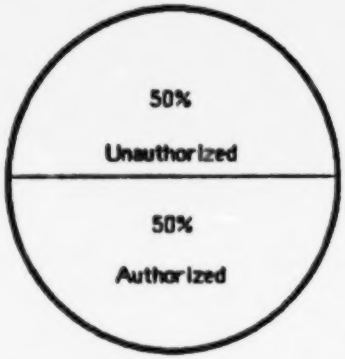
Dr. Joe Curry, who directed the survey, points out that software piracy deprives publishers of revenues that could support current products and finance future developments. Future Computing research indicates that publishers now devote 5% - 10% of their revenues to product development and research and development.

The high level of piracy also makes it more difficult for entrepreneurs to attract venture capital for new software companies and products.

In addition, piracy makes software more expensive for the person who uses an authorized copy, Curry says.

Further information on software piracy is available from Future Computing, 8111 LBJ Freeway, Dallas, TX 75251, 214 437-2400. Future Computing is a unit of McGraw-Hill Information Systems Company.

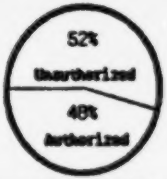
Proportion of Unauthorized and Authorized Copies of Office Software Surveyed



All Programs Surveyed

dBase
PFS: File
PFS: Report

Data Base Programs



Lotus 1-2-3
Multiplan
VisiCalc
BPI General Accounting

Spreadsheets/Accounting Programs

Apple Writer II
EasyWriter
HomeWord
MultiMate
WordStar

Word Processing Programs

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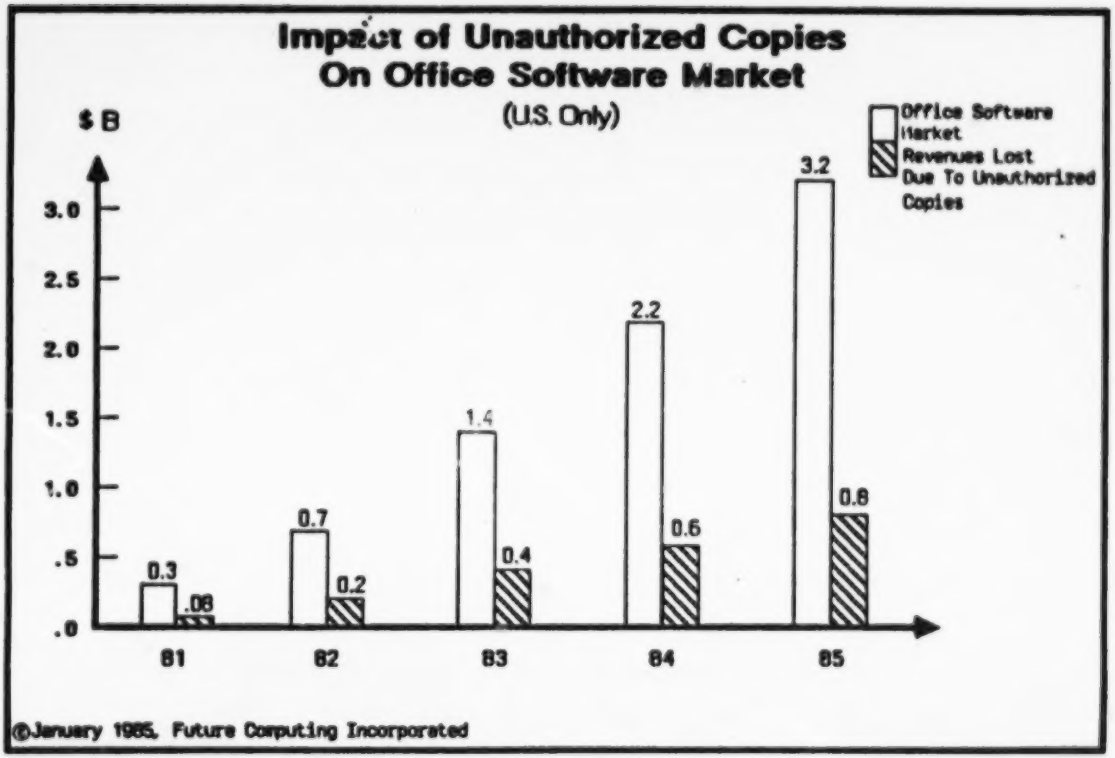
Impact of Unauthorized Copies
On Office Software Market
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